PARIS-CACHAN . TROYES MONTPELLIER . SAINT-NAZAIRE DAKAR

## Study engineering in France

ENGINEERING EDUCATION









ENGINEERING SCHOOL Creating the future together

### *EPF, a general engineering school* with a responsible and international outlook



**II** The international dimension is one of EPF's strong points, and we put it at the centre of everything we do at the school. Thanks to bi-national programmes, dual degrees, more than 150 international partners throughout the world and the compulsory learning of two foreign languages, EPF is ranked among one of the top French Engineering Schools in terms of international studies. Our four campuses make it a priority to provide a warm welcome to international students, each campus having its own special unit within the school and two student societies dedicated to offering them an exceptional learning experience throughout their time with us at EPF. 77

> Jean-Michel NICOLLE Managing Director, EPF

#### **EPF IN A NUTSHELL**

Founded in 1925, the École Polytechnique Féminine (EPF) is a leading French General Engineering School offering its students a comprehensive multidisciplinary education. The school has four ideally located campuses in Paris-Cachan, Troyes, Montpellier and Saint-Nazaire, home to over 2,600 students!

EPF is proud to be one of the first-ever institutions in France to offer women access to engineering studies. With **35% of female students**, it is still one of the schools with the highest number of women studying engineering. Open to gender diversity since 1994, **EPF trains general engineers who are open to the world**.

For almost a century, EPF's training programmes have been built around three fundamental values: **Innovation, Boldness and Engagement**.

**Our objective** is to train outstanding polytechnic engineers while contributing to cutting-edge research for the industry of the future by supporting innovation for the benefit of society.

#### Diversity is also a key element of our school.

EPF makes access to higher education for all a priority at the heart of its recruitment policy.

With a powerful international outlook, we offer you the possibility of completing part of your studies overseas through exchange programmes and dual degree courses.

**EPF makes it a priority to provide a warm welcome to international students at its campuses**. The international development department and two student societies are in charge of supporting you throughout your studies in France.





#### **EPF KEY FIGURES**

**4** French campus locations in Paris-Cachan, Troyes, Montpellier and Saint-Nazaire

campus location in Dakar (Senegal)

**5** engineering degrees accredited by the *Commission des Titres d'Ingénieurs* (Commission for French Engineering Qualifications) **35%** of female students

150+ university partners worldwide

175 support staff and professors

650 lecturers from the world of industry 600 partner companies

**13,500** EPF alumni

For my higher education studies, I wanted to attend a school that would allow me to reach my full potential and acquire a certain intellectual background at the same time. By searching on the Internet, I was able to compare various programmes, and in particular on the website of the Gabonese National Scholarship Agency, which offers a list of institutions they have signed agreements with. Among all the universities and schools, EPF was the one that met my expectations not only in terms of teaching but also the quality of student life. With its exceptional multidisciplinary curriculum and a particularly active community spirit, EPF immediately captured my interest. This is why I chose the school for my higher education because I saw it as the best option to prepare for the career of biomedical engineer.

Maria-Victoire ASSELE TSETSE, EPF student on the Troyes campus

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# **Join** an engaged "Grande École" engineering school

As one of the leading French engineering schools, EPF is a selective higher education institution offering a general programme that focuses on the excellence of its students.

The cohorts are organised to offer you a high ratio of supervision and individual support throughout your degree course.

EPF is open to applicants from the end of high school and at various entry levels throughout higher education studies.

International students can apply to join the school as early as the undergraduate cycle (the first 3 years), and also in the  $4^{th}$  year.

The school's general engineering training programme offers many advantages and allows you to benefit from a rich and comprehensive education so as to specialise in the field of your choice after acquiring solid foundations.

#### PEDAGOGICAL AND DIGITAL INNOVATION AT THE HEART OF THE LEARNING PROCESS

EPF employs a project-based approach to learning, so that students are confronted with real-life situations they will encounter in the world of work. This project-based learning method allows students to develop technical skills under the supervision of professors, as well as soft skills, which are essential to the qualities required of an engineer.

The school is also very open to new technologies and uses them daily in its programmes. EPF has created a number of technological laboratories, called TechLabs, where students can use various machines, such as 3D printers for their projects.

The IPN (Pedagogical and Digital Innovation) unit also exists to provide ideas for the use of new technologies in the school's teaching methods. The work of the IPN unit focuses on blended and digital learning.



### EPF programmes

#### A GENERAL AND CAREER-ORIENTED PROGRAMME

#### ► UNDERGRADUATE CYCLE

Year 1	30 ECTS Semester	1 <b>SI</b>	30 E	CTS	Semester 2	S2	
Year 2	30 ECTS Semester	1 <b>S3</b>	30 E	стя	Semester 2	S4	
Year 3	30 ECTS Semester	1 <b>S5</b>	30 E	стя	Semester 2	S6	
	September	January	Febru	ary		June	
► MASTERS CYCLE							
Year 4	30 ECTS Semester	1* <b>S7</b>	30 E	стя	Semester 2 Majo	or S8	
Year 5	24 ECTS Semester	1 Major <b>S9</b>	30 E	стя	Semester 2 PFE*	* S10	
*"Student-engineer" internship ** Final project							
Possibility of further study				Graduate employment			
MAJORS							
会 Aeronautics & Space		PARIS-CACHA	AN			-	
A Materials & Sustainable Structures		PARIS-CACHA	PARIS-CACHAN				
Digital engineering		PARIS-CACHA	PARIS-CACHAN			-	

PARIS-CACHAN

PARIS-CACHAN

MONTPELLIER

MONTPELLIER

TROYES

TROYES

Mahdi CHEMKHI Head of the EPF TechLab in Troyes

🗘 Engineering management 🛟

Standard Content of Co

🕼 Data engineering 👫

🛞 Energy & Environment 👬

Bustainable industrial design

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**U** Having the TechLab at EPF is a real advantage for our students as it places innovation, creation and entrepreneurship at the heart of their studies. The use of the TechLab offers an extra dimension to their theoretical training, giving access to a variety of machines, which allows them to be more engaged in the projects they undertake during their course.

As such, the TechLab provides technological support, giving students the tools needed to carry out their projects. It also offers student engineers the opportunity to discover the world of research through projects supervised by researchers. **??** 

# An international outlook

Many courses in the Master's degree cycle have been taught in English for several years now, making it possible to accept non-French-speaking students, particularly as part of an exchange programme. Some majors are even taught entirely in English. The majors extend over two academic years and are structured around two academic semesters, supported by two semesters of internships.







This major prepares engineers capable of understanding the strategic and tactical challenges facing a company, and of designing and deploying the most appropriate tools to optimise operations or to facilitate the company's transformation, particularly its digital transformation.



The Major in Data Engineering prepares flexible and adaptable engineers, capable of assisting companies and laboratories in the organisation and exploitation of their data. It favours a systemic approach integrating legal, ethical and environmental aspects.





#### Energy & Environment 🖚

This major prepares flexible and adaptable engineers, capable of solving new industrial problems related to the ecological transition. Particular emphasis is placed on the role of digital transformation.

#### MASTER OF SCIENCE ICE: INNOVATION, CREATIVITY AND ENTREPRENEURSHIP



The Master of Science in Innovation, Creativity & Entrepreneurship aims to develop students' skills in engineering, management and design for innovation & value creation through intra or entrepreneurship.

This course was created in partnership with South Champagne Business School and in collaboration with the Aube Region Technology Park, which is home to over 60 start-ups.

Accredited by the French Federation of Engineering Schools (Conférence des Grandes Écoles), this programme is open to engineers, managers and designers.

**Run 100% in English** and attended by students representing a variety of nationalities, the MSc ICE features a pedagogical approach that focuses on projects, a mix of student profiles and teamwork on truly innovative and societal challenges.

In order to develop their entrepreneurial culture and skills, students benefit from an **«entrepreneurial training»** phase, which involves meetings with business leaders, networking sessions, lecture series, participation in workshops and Plug & Start Campus days, and meetings with lobby groups from the European Commission.

#### **EXCHANGE PROGRAMMES**

EPF has signed exchange agreements with 150 partners around the world, allowing its students to study abroad for a semester, as well as allowing students from partner institutions to spend 1 or 2 semesters on exchange at one of our 4 campuses in France.

You can take courses in French or English depending on your specialisation. **Exchanges in Europe are part** of the Erasmus + programme.



#### FOREIGN LANGUAGE SKILLS

The command of languages, and of English in particular, is just as much a requirement today as the engineering sciences. **Engineering students therefore study two foreign languages, of which English is compulsory**. The other languages taught include German, Chinese, Spanish, Italian and Japanese. The portfolio of languages offered may change according to demand and the campus where students are studying.

**EPF also has its own French as a Foreign Language department**. International students can attend French classes once or twice a week depending on their level.



#### **DUAL DEGREE PROGRAMMES**

In addition to a one-semester minimum of international experience, **EPF offers its students the option of dual degree programmes** in one of its partner universities. Students can study for a degree from the following universities:

- · Germany Hochschule Karlsruhe\*
- · Belgium Université de Liège
- · Canada Université du Québec à Chicoutimi
- · Canada Université de Sherbrooke
- · Spain Universidad del Pais Vasco\*
- · United States Georgia Institute of Technology
- · Colombia Universidad EIA\*
- · United Kingdom Glyndwr University

Some of these agreements are reciprocal and allow students from the partner university to obtain the EPF degree qualification. Please contact the International Development Department for more information.

### *Career-oriented training* and research at the heart of the EPF learning process

The courses offered by the EPF are specially designed to meet the requirements of the world of work, in France and abroad.



### 600+ partner companies in

France and abroad, in large groups, SMEs and start-ups

#### PUTTING THEORY INTO PRACTICE WITH INTERNSHIPS

Lasting from 4 weeks to 6 months, internships are compulsory throughout the school's programmes of study, starting in the first year. Internships can also be carried out abroad.



#### CASE STUDIES TO HELP YOU UNDERSTAND WHAT COMPANIES REALLY EXPECT

EPF is fortunate to have partner companies that offer students case studies on real-world issues they encounter in their day-to-day business. This prepares you for the world of work under virtually real-life conditions! During the Master's programme, teachers are brought in from industry.

#### CONFERENCES TO BROADEN YOUR KNOWLEDGE

Corporate partners and EPF graduate engineers share their professional experiences to help you discover the professions, fields and functions you can pursue during an engineering career.



#### TAKE PART IN STUDENT CHALLENGES

Innovation, Boldness, and Engagement are three values that our engineering students have the opportunity to demonstrate during physical or online competitions and hackathons organised by companies. EPF has partnerships with major groups such as Bouygues, offering our students challenges on issues they encounter on a daily basis.

A key example is the 24H Innov'Handicap Challenge, which allows students from the four campuses to work intensively and collaboratively for one day on innovative solutions to facilitate the day-to-day life of people with disabilities. You can also take part in challenges held by companies or regions, such as the Game of Brain challenge won this year by three students from the Master of Science Innovation, Creativity & Entrepreneurship.



#### RESEARCH AT THE HEART OF THE EPF APPROACH

Discovering research is also an integral part of the EPF curriculum.

Throughout your studies, you learn about the various careers available in the world of research, and in particular about the subjects studied at EPF.

You also have the opportunity to continue your studies at the end of Year 5 with a doctoral degree, thanks to EPF's partners.

#### A WORLDWIDE ALUMNI NETWORK

The EPF alumni network counts no less than 13,500 graduates in more than 44 countries around the world. They have created an association called «AEPF: Alumni EPF» to share their experiences and also to allow students to create contacts in the world of work and help them find industrial placements and jobs.

**13,500** alumni in France and around the world

# *Experience* an exciting year in France

#### A VIBRANT STUDENT LIFE

Meeting people, sharing experiences and being open-minded are key to a successful time spent studying abroad!

This is why EPF offers a vibrant and varied student life on its four campuses, notably thanks to the numerous student-run clubs and societies.

The school has some fifty student clubs and societies, each specialising in a specific field, such as sport, culture, entrepreneurship, humanitarian work, the arts, music, etc.

Throughout the year, all the clubs and societies organise various events to bring the campus to life and encourage students to get together.

An induction week is held at the beginning of the academic year to allow everyone to settle in and get to know the other students.

### HELPING INTERNATIONAL STUDENTS SETTLE IN

15% of EPF students are international and are considered an integral part of the student community. Everything is done throughout the year to ensure that their experience in France goes as smoothly as possible. The school ensures that they have settled in well and helps with their administrative procedures.

The International Development Department is available to assist international students in finding accommodation and dealing with administrative procedures, as well as helping them throughout their time at EPF if they need help with their studies.

Two student societies exist to specifically support international students: ESN Paris-Cachan (Erasmus Student Network) and the Bureau de l'International (on the Montpellier campus), which is in charge of welcoming international students on campus, organising events to help them settle in and promoting international mobility.

**Special events are organised** at different times of the year to allow international students to practice the language and discover French culture.





**Clémence TANGRE** President of the ESN Cachan Student Society

**44** It is important for us that international students settle in properly and meet French students. We plan to organise several events throughout the year, including a trip to Mont Saint Michel. **11** 

# **Applications**

#### ▶ EPF ENTRY REQUIREMENTS

Applications are welcome for EPF's general engineering programme from students with a **scientific background**.

Applications are welcome for the MSc ICE from students with a scientific background, but also from students with **a business or design background**.

#### ▶ YOUR QUALIFICATIONS

The General Engineering programme is open to students with the **French baccalaureate** (or foreign equivalent).

The MSc ICE is open to students with an **undergraduate level qualification**.

#### ► FRENCH LANGUAGE REQUIREMENTS

A minimum level of French (and English) is required to obtain the general engineering degree. It is therefore necessary to reach a B2 level in French at the time of the final examination panel (Year 5).

Depending on the year of admission, it is strongly recommended to have a minimum level of French at the time of application (level B1 CECRL).



At EPF, we know that it can be complicated arriving in a new country where everything is different! This is why our friendly staff are available to help you with any administrative procedures during your stay in France.

We are happy to answer your questions:

- Concerning studies and admissions
   Incoming.Students@epf.fr
- Concerning a partnership with a company or a university international@epf.fr

#### QUALIFICATIONS

#### FRENCH BACCALAUREATE OR EQUIVALENT

- French language proficiency: fluent Registration in Year 1 of the Engineering programme Admission subject to qualifications
- French language proficiency: B1 Registration in Year 1 of the Engineering programme Admission subject to gualifications

### ONE YEAR OF HIGHER EDUCATION STUDIES TO UNDERGRADUATE

- French language proficiency: fluent
   Registration in Year 2 or Year 3 of the Engineering
   programme
   Admission subject to qualifications
- French language proficiency: B1 Registration in Year 1 of the Engineering programme Admission subject to qualifications
- French language proficiency: from A2 to B1 Registration in Year 3 of the Engineering programme in English

#### FROM UNDERGRADUATE TO 5-YEAR POST-GRADUATE

- French language proficiency: fluent Registration in Year 4 of the Engineering programme in English Admission subject to qualifications
- French language proficiency: B1 Registration in Year 4 of the Engineering programme
- French language proficiency: from A2 to B1
   Registration in Year 4 of the Engineering
   programme
   MEM (Major in Engineering Management
   or MDE (Major in Data Engineering)



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